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Program Mission

To protect, preserve, and enhance Washington's surface and ground water quality, and to promote the wise management of water to benefit current and future generations.

Environmental Threat

Threats to water are varied and cumulative. Once polluted, water is extremely costly or impossible to clean up. Continued and rapid population growth in our state threatens our water and affects our ability to maintain clean water for drinking; for industries such as high-tech computer manufacturers, agriculture, and shellfish; and for recreation, fish habitat, and other uses. The Water Quality Program is taking a number of actions to help communities maintain their quality of life by protecting water quality and addressing a variety of threats that could harm our environment, human health, and economy.

In lakes that have been assessed by Ecology, the primary water quality problem is excessive nutrients which cause accelerated algae and aquatic plant growth. In estuaries and streams Ecology has assessed, the primary human-caused water quality problem is fecal coliform bacteria which comes from agricultural activities, inadequate wastewater treatment plants, and failing on-site sewage systems. The bacteria are an indicator of pollution and are pathogens that can cause serious illnesses and threaten our state's commercial and recreational shellfish industries. Elevated water temperature is the leading natural condition water quality problem in estuaries. All of these problems contribute to pollution that threatens salmon and steelhead.

Program Origin and Laws

Chapter 90.48 RCW, Water Pollution Control Act

This act, passed in 1945, created a water pollution control agency, which became a part of the Department of Ecology in 1970. In 1948, Congress passed the federal Water Pollution Control Act. Both the federal and state acts have been amended several times. The Water Quality Program has been in existence since the legislature created the Department of Ecology.

Federal Clean Water Act

Adopted by Congress in 1972, the objective of this act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Requirements include: adoption of water quality standards; water quality monitoring and assessments; development of Total Maximum Daily Loads (pollution loading limits) for waters not meeting water quality standards; certification for federally licensed or permitted projects to meet water quality standards; implementation of the National Pollutant Discharge Elimination System (NPDES) permit program; control of nonpoint sources of pollution; and financial assistance programs.

Federal Safe Drinking Water Act

Passed by Congress in 1974, this act established programs to protect underground sources of drinking water. In 1984, EPA delegated Ecology as the lead for the Underground Injection Control Program to prevent discharges to ground water.

Chapter 76.09 RCW, Forest Practices Act

Passed in 1974, this act required Ecology to adopt rules for water quality protection in cooperation with the Forest Practices Board. Amendments in 1999 removed Ecology's rule making requirement. Ecology is a member of the Forest Practices Board and must approve of any changes to the Forest Practices Rules that affect water quality.

Chapter 90.70 RCW, Puget Sound Water Quality Authority

In 1985, this act created the Puget Sound Water Quality Authority to develop a comprehensive plan for the protection of Puget Sound. The Authority was replaced by the Puget Sound Water Quality Action Team in 1996. Key features of the Puget Sound Plan implemented by the Water Quality Program are point and nonpoint source pollution controls, stormwater control, and watershed planning.

Chapter 70.146 RCW, Water Pollution Control Facilities Financing Act

In response to the phase out of the Federal Environmental Protection Agency Construction Grants Program and declining Referendum 39 funds and the need to support water quality efforts in Puget Sound and statewide, this act was passed in 1986. It created the Water Quality Account, which includes the Centennial Clean Water Fund, to provide water quality grants and loans to local government, Native American tribes, and other public bodies.

Chapter 70.105D RCW, Model Toxics Control Act
Passed by voters in 1988, a portion of the initiative that adopted this act (I-97) requires all wastewater discharge permit holders pay permit fees to cover the full cost of processing permits and administrating the program.

RCW 43.21A.650, Freshwater Aquatic Weeds Account
In 1991, the legislature created this account to combat noxious aquatic weeds in state waters. The program provides grants and technical assistance and education to local communities for the prevention and eradication of noxious freshwater aquatic weeds.

Chapter 90.64 RCW, Dairy Waste Management Act
Originally passed in 1993, this Act was significantly changed in 1998 by SB 6161. The law now calls for all dairy farms to register with Ecology every other year. By October 1, 2000, Ecology must also inspect all 754 dairy farms surveying for actual or potential violations of state and federal water pollution control laws and to identify farms needing technical assistance. All dairy farms must develop and gain conservation district approval by July 1, 2002, of a nutrient management plan to prevent surface and groundwater pollution. The plan must be certified by both the conservation district and dairy as being fully implemented by December 31, 2003.

Chapter 90.46 RCW, Reclaimed Water Use
This act, passed in 1995, requires Ecology to develop standards, procedures, and guidelines for direct aquifer recharge using reclaimed water. Ecology is working closely with the Department of Health to implement the act.

Stakeholders and Constituents
The Water Quality Program works with numerous local, state, and federal agencies, business groups, environmental organizations, and citizens. The watershed approach to water quality management encourages the wide participation of all interests within designated river basins to solve water quality problems and prevent pollution.

The Water Quality Program has two main advisory committees: The Water Quality Partnership, originally convened in 1994, serves as a standing policy advisory committee to Ecology. It provides stakeholder input on a variety of program elements including permitting and enforcement, stormwater, dairy nutrient management, water quality standards, groundwater protection, and nonpoint source pollution control. Groups represented on the Partnership include environmental organizations, industries and small businesses, local, state, and federal governments, and Native American tribes.

The other major advisory committee is the Financial Assistance Council. The Council is comprised of conservation districts, cities, counties, tribes, and state and federal agencies. The Council addresses the department on the administration of the department's water quality grants and loans programs.

Under written agreements, Ecology works with several state agencies, including the departments of Agriculture, Health, and Transportation, the Washington Conservation Commission, and local conservation districts on such diverse issues as aquatic weed control, shellfish and salmon protection, stormwater runoff, and dairy waste management.

Local governments
Ecology is producing tangible results for the state's regulatory reform efforts by streamlining its grant and loan programs. Among the improvements are integrating state and federal grant and water programs to the maximum extent possible to gain flexibility to fund more projects and address local priorities, address financial needs of small communities, and delegate engineering reviews.

Performance Partnership
Ecology and EPA have embarked on a fundamentally new and improved partnership, the Performance Partnership Agreement. Within the confines of federal laws and standards, the agreement identifies mutual priorities, strategic goals, objectives, and activities that the agencies will jointly undertake each biennium.

Activities
Point Source Pollution Prevention and Management
This is the state's principal regulatory program for reducing pollutant discharges to Washington's surface and ground water. Its mission is to regulate discharges of pollutants to surface and ground water from industrial and municipal point sources of wastewater and stormwater. Education, technical assistance, enforcement, and public access to wastewater and receiving water information help ensure risks to health are minimized. Ecology conducts about 1,000 inspections and site visits per biennium to wastewater discharge permit holders.

Ecology maintains a steady pace of issuance of individual permits and a manageable backlog of approximately six percent of all permittees, As a result of issuing permits Ecology increased the number of permitted facilities from approximately 1,000 to more than 4,000 as stormwater discharges were required to be permitted in accordance with new federal regulations.

Ecology provides on-site technical assistance to wastewater discharge permit holders. We also prepare pollution prevention and best management practices publications, conduct workshops, and hold client-group sessions.

❖ *Technical Assistance for Small Municipalities:* Each year, staff visit over 50 small communities, giving them assistance to ensure clean water. The human health and environmental results of those visits are substantial.

❖ *Technical assistance to un-permitted discharges:* Ecology provides assistance to entities that have the potential to harm water quality. Activities include participating in single industry campaigns, such as a recent effort focusing on boat yards and marinas.

❖ *Enforcement:* During follow-up on permit violations, the Water Quality Program works with permit holders to achieve compliance. We continue to use enforcement avenues at problem sites.

Results

❖ *Preventing Pollution from Wastewater Discharges:* Since 1991, the total number of facilities controlling pollutant discharges under wastewater discharge permits has increased by 73 percent, resulting in less pollution in our lakes, rivers, and marine waters

❖ *Streamlining the Way We Do Business:* Ecology is working with industries to make the wastewater discharge permitting process more efficient and effective by developing and issuing eight general permits rather than numerous individual permits.

Nonpoint Source Pollution Prevention and Management

Nonpoint pollution threatens basic ecosystem balance and poses one of the most significant health and economic threats to the people of Washington. Through partnerships, Ecology focuses its efforts on solving common nonpoint source problems which threaten salmon, shellfish, drinking water, and aesthetic values, and contribute to flooding and loss of usable land.

Our efforts to address nonpoint source threats include raising awareness, encouraging action, providing tools, and supporting local activities. Working with local decision makers using the watershed approach, Ecology assesses needs and determines level of support.

❖ *Forest practices technical assistance:* Ecology provides assistance to the Department of Natural Resources on water quality issues related to forest management, focusing on watershed analysis, shorelines, water supplies, road management planning, and participation in interdisciplinary team reviews.

❖ *Agricultural technical assistance:* Ecology implements agricultural water quality programs under the Agricultural Memorandum of Agreement among Ecology, Conservation Commission, and 47 of 48 conservation districts around the state. This process allows for referral of farmers to conservation districts for technical assistance and farm planning as an approach to improving water quality. Ecology provides enforcement to assist local conservation districts with non-cooperative farmers.

❖ *Dairy waste permitting:* Ecology conducts inspections in certain geographic areas, responds to complaints, and brings dairies that are having water quality problems under permit. A permit requires a dairy to develop and implement a farm plan to manage dairy waste using best management practices.

❖ *Enforcement:* Ecology provides followup to complaint response and permitting, working with local governments and other agencies to focus on problem sites.

❖ *Local government assistance:* Ecology provides technical and regulatory input to local planning decisions by reviewing Growth Management Act and State Environmental Policy Act documents.

❖ *Water quality assessment, monitoring, and standards:* From selected waters around the state, Ecology collects data and evaluates conditions related to nonpoint source pollution. Ecology provides data to local governments and other decision makers.

❖ *Puget Sound Water Quality Management Plan:* Ecology continues to assist local planning efforts (under Chapter 400-12 WAC) and implement stormwater, shellfish monitoring, and other plan elements.

❖ *Federal Nonpoint Source Program (Section 319 of the Clean Water Act):* Ecology administers the federal nonpoint source pollution prevention and control program, which provides education, technical assistance, financial assistance, and enforcement.

Working Toward Sustainable Natural Resources

❖ *Watershed Approach:* The watershed approach is nationally recognized as an effective tool to improve water quality. Using this approach to address point and nonpoint pollution allows Ecology to emphasize local service delivery. This approach provides an organizational guide to improve coordination of water quality activities, service delivery, protection and prevention activities, and overall improved management of the state's waters.

❖ *Water Quality and Watershed Assessments:* Results of assessments are published in two reports: a water quality assessment report (305b report) and a report listing waters that do not meet water quality standards (303d list). The water quality assessment (305b) report is the most comprehensive assessment of Washington's waters. The report that lists waters not meeting water quality standards (303d list) is a strong regulatory tool which results in developing management plans to improve water quality.

❖ *Lower Columbia River National Estuary Program:* Ecology participates in and provides assistance to the Lower Columbia River National Estuary Program, a joint Oregon/Washington program established to protect lower Columbia River water quality.

Sustainable Communities and Natural Resources

The financial assistance function of the Water Quality Program is aimed at reducing and preventing pollution by providing state and federal grants and low-interest loans in conjunction with technical assistance to local governments, state agencies, and Native American tribes. Funds help pay for water pollution control facilities to improve and protect surface and ground water quality. Ecology also provides grants and low interest loans for nonpoint source control projects, including watershed planning, stormwater management, and agricultural best management practices.

Results

Each year, Centennial Clean Water Fund grants and loans help build wastewater treatment plants that remove thousands of tons of pollution. Since 1988, Centennial funding and technical assistance have helped communities protect water resources. Annually Ecology provides Centennial grants and loans to local governments and Native American tribes, and State Revolving Fund low interest loans.

Major Issues

Endangered Species Act

Endangered Species Act (ESA) listings of aquatic species such as salmon have numerous water quality implications. In August 1997, the National Marine Fisheries Service listed upper Columbia River steelhead as endangered (meaning the species is in imminent risk of extinction) and Snake River steelhead as threatened with extinction.

If Washington state develops an adequate conservation plan for listed species, it can limit federal involvement in water quality standards, total maximum daily loads (TMDLs), and nonpoint source plans. Ecology is working on developing plans to protect aquatic species and their habitat. The goal is to restore healthy fish populations and habitat. The objective is to develop state strategies for healthy fish runs so that we can manage state resources without federal intervention while maintaining a healthy economy.

We are also working with federal agencies on a Habitat Conservation Plan which will meet the requirements of TMDLs and vice versa. Without action by the state, nearly all waters in Washington could have fish species listed as endangered or threatened. Endangered species listings not only pose a significant threat to our ecosystem, but also to our quality of life and economic stability. Agriculture, hydropower, and fisheries are just a few of the industries that could be affected by ESA listings.

Nonpoint Source Water Pollution

Nonpoint source pollution, the pollution that comes from many diffuse sources, is the most prominent source of pollution in our state. Sources include: fecal coliform bacteria from poorly managed dairy farms, failing septic systems, and pet waste; elevated water temperature from clearing trees and shrubs for land development, agriculture, and forestry practices; and pesticides from agriculture and gardening activities.

Along with water supply and watershed management, nonpoint agricultural activities top Ecology's environmental agenda. Ecology, with the assistance of a broad range of agencies, tribes, local governments, and interest groups, recently drafted a Nonpoint Source Management Plan for the state. The plan includes a critical analysis of Washington's efforts to address nonpoint pollution and identifies actions needed to improve the effectiveness of existing programs. In streams not meeting water quality standards, agriculture accounts for 57% of the problem. We will work collaboratively with the agricultural industry to encourage farmers and ranchers to help get and keep our waters clean.

The new dairy nutrient management program is showing positive results. Ecology is working with the agriculture industry to embrace its tradition of conserving the land's ability to support individual farms, and encourage farmers and ranchers to take steps toward stewardship of entire watersheds. Ecology is working with state legislators, the dairy task force, the Dairy Federation, individual producers, and others.

Waters Not Meeting Water Quality Standards

<%-2>The federal Clean Water Act requires Ecology to identify waters that do not meet water quality standards or are not expected to meet standards within two years of installing technology-based controls. The 1996 list contained 666 waterbody segments (portions of lakes, rivers, and estuaries), while Ecology proposed 636 waters for listing in 1998. EPA has reviewed and approved Ecology's list, but is also proposing to add seven additional waters to the 1998 list. EPA has completed the public comment period on their proposed additions and are expected to release the final 1998 303(d) list soon.

After compiling this list, Ecology must prepare water cleanup plans or TMDLs to improve the health of the waters. The TMDL includes an analysis of how much pollution a waterbody can receive and still remain healthy for its intended uses and meet water quality standards. Through a public process, Ecology develops control actions to limit water pollution activities. We then set conditions in discharge permits and nonpoint source management plans, and develop and implement a monitoring plan to test the effectiveness of the controls.

In 1991, the Northwest Environmental Advocates and Northwest Environmental Defense Center filed a lawsuit in the Ninth Federal District Court, faulting EPA and Ecology for an inadequate 303(d) listing and TMDL program. The court dismissed Ecology from the suit because EPA has final responsibility to conduct TMDLs. In 1994, dissatisfied with progress on TMDLs, the plaintiffs amended the lawsuit. The parties reached agreement in principle on a revised plan. The settlement is significant for three reasons: the TMDL process is vital to improving water quality; the settlement could require significant staffing resources for Ecology; and, if a settlement is not reached, EPA would become directly involved in mandating TMDLs and water quality improvements and protections for Washington state.

Water Quality Standards

Water quality standards are intended to protect surface waters for public health and enjoyment; the propagation and protection of fish, shellfish, and wildlife; and recreation in and on the water. Ecology is currently updating its surface water quality standards to improve protection of aquatic resources. Assisted by advisory panels and technical workgroups, Ecology is developing two significant proposed changes to the water quality standards.

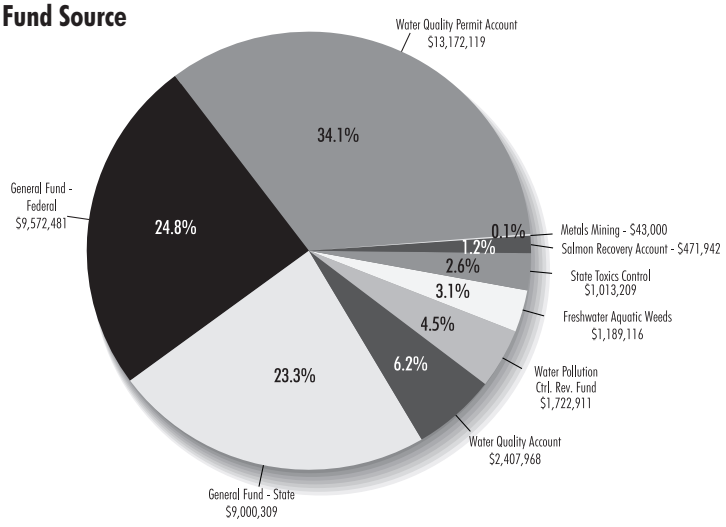
One of the proposed changes involves the antidegradation process, which is designed to ensure that the water quality of a lake, river, or marine water will not be degraded except when certain conditions are met.

The second water quality standard Ecology is proposing to change is the way the beneficial uses of waterbodies are assigned and protected. The proposed change develops a system by which Ecology assigns protected uses to individual waterbodies in a more site specific and scientifically defensible manner. The result may be that some waterbodies receive more protective criteria, while others have the existing level of regulatory protection reduced.

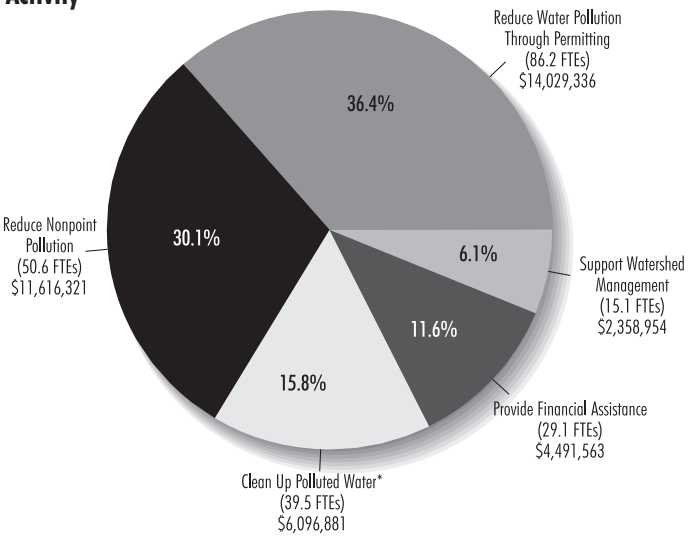
Infrastructure Financing

Water quality needs far exceed the funding available to protect and improve our state's waters. Population growth, accompanied by urbanization and ongoing industrial processes, have increased pressure on the infrastructure which is necessary to adequately protect human health and the environment. Demand for wastewater treatment, potable drinking water, stormwater management, and waste disposal is fast outstripping the capacity of existing facilities. Nonpoint pollution presents additional challenges and costs. Communities requesting grants routinely outstrip the amount of money available. These funds are used for water pollution management projects, such as collection sewers, sewage treatment plants, combined sewer overflows, and stormwater treatment facilities. Ecology is working with its Financial Assistance Advisory Committee and other state agencies to address these problems.

Water Quality Program Dollars by Fund Source



Water Quality Program Dollars by Activity



* Of the "Clean Up Polluted Water" FTEs and Funds, 4.65 FTEs and $698,000 of funds are State General Fund Proviso TMDL funding which will not be spent until April, 2000.

Water Quality Program Budget

Operating Budget: $39,593,055; Staffing: 220 FTEs

Fund	Amount ($)	Sources	Uses
General Fund - State	9,000,309	Multiple	Point source enforcement of permit requirements. Also, Puget Sound Plan activities for shellfish protection; nonpoint watershed management; and stormwater control, and operator certification program. Fauntleroy cove, forest practices compliance, urban stormwater advisory committee, TMDLs, gravel removal studies, wastewater reuse, and aquatic plant management EIS.
General Fund - Federal	9,572,481	Federal grants	Numerous EPA grants for point and nonpoint source control; planning and implementation grants to local governments; groundwater protection; and administrative moneys for pass through funds
Salmon Recovery Account	471,942	Excise taxes on cigarettes and other tobacco products	Bring about compliance with water quality laws related to nonpoint source pollution.
Water Quality Account	2,407,968	Excise taxes on cigarettes and other tobacco products; sales tax transfer; loan repayments, interest payments; and state general fund transfer	Grant and loan management; technical assistance to local governments for wastewater treatment facilities and nonpoint projects.
State Toxics Control	1,013,209	Hazardous substance tax, recovered remedial actions and penalties collected	Cooperative effort with Oregon and EPA to enhance the health of the lower Columbia River through the National Estuary Program. The Aquatic Plant Management Program assesses human health and environmental risk associated with various aquatic pesticides. Also, work with agricultural community to reduce pesticide and other contamination
Water Quality Permit Account	13,172,119	Fees assessed on the holders of wastewater discharge permits	Issuance and management of federal and state wastewater discharge permits
Freshwater Aquatic Weeds	1,189,116	Fees on boat trailers	Grants to local governments to prevent, remove, or manage invasive freshwater aquatic weeds.
Metals Mining	43,000	Fees collected from active metals mining and milling operations	Inspections required by metals mining act
Water Pollution Control Revolving Fund	1,722,911	EPA grant and state match	Administration of a loan program for the construction or replacement of water pollution control facilities. Activities include portfolio management and technical assistance to local governments for point, nonpoint, and estuary projects
Capital Budget Funding: $266,696,141			
Referendum 26	1,041,391 *(reappropriation)*	Sale of Bonds; loan repayments and interest payments	Grants/loans for the construction or improvement of public waste disposal facilities
Referendum 39	5,084,437 (*reappropriation*)	Sale of Bonds; loan repayment and interest payments	Grants/loans for the construction or improvement of public waste disposal facilities.
Water Quality Account	81,334,337 (*$29,334,337 reappropriation and $52,000,000 new appropriation*)	Excise tax on cigarettes and tobacco products; sales tax transfer; loan repayments and interest payments	Grants/loan for water pollution control facilities; nonpoint source control and water quality improvement planning and implementation activities
Public Works Assistance Account	10,000,000	Real estate excise taxes, loan repayments and interest payments	Grants for water pollution control facilities; nonpoint source control and water quality improvement planning and implementation activities for communities with populations less than 5,000
State Revolving Loan Fund	169,235,976 (*$90,029,777 reappropriation and $79,206,199 new appropriation*)	Federal; capitalization grants; loan repayments; interest repayments and state match	Loans for the construction or replacement of water pollution control facilities; nonpoint source control activities and estuary management